IN THE CLAIMS:

Please find below a listing of all pending claims. The statuses of the claims are set forth in parentheses. For those currently amended claims, underlined emphasis indicates insertions and strikethrough emphasis (and/or double brackets) indicates deletions.

1.   (Currently Amended) An unauthorized access prevention system which resides within a user's communication network, including the unauthorized access prevention system comprising:

a traffic recording unit for recording information on traffic that flows into the user's communication network and arrives in a customer site;

a search unit for searching, from the information recorded in the traffic recording unit, the flowing-in path of unauthorized access, which is transmitted from a transmitter and is included in the traffic, to services disclosed from the customer site to other communication networks adjacent to the user's communication network via the user's communication network;

a determination unit for determining a plurality of countermeasure implementation planning placeplaces from among a plurality of places, which include the other communication networks, edge routers of the user's communication network each of which is arranged on each border of the other communication networks, and POP (point of presence) edge routers within the user's communication network, the plurality of places being for protecting the services from the unauthorized access based on a result of the search; and

a notification unit for notifying at least one or more notified parties, which include other unauthorized access prevention systems each of which resides within the other communication networks, the edge routers of the user's communication network, and the POP edge routers within the user's communication network, only a flow source

~~that is one of the other communication networks~~ of the determination of the countermeasure implementation planning ~~place~~places, when the determination unit determines the notified parties ~~flow source~~ as the countermeasure implementation planning ~~place~~places for a reason that the unauthorized access was flowed into the user's communication ~~network.~~network, wherein:

the notification unit notifies the other unauthorized access prevention systems of the determination when the determination unit determines the other communication networks as the countermeasure implementation planning places, and

the notification unit notifies the edge routers or the POP edge routers of the determination when the other communication networks do not have a reliable relationship with the users' communication network even if the determination unit determines the other communication networks as the countermeasure implementation planning places.

2.   (Currently Amended) A recording medium in which a program that directs a computer residing within a user's communication network to implement a countermeasure against unauthorized access is recorded and in which the program can be read by the computer, and the program directs the computer to perform the following processes by being executed by the computer:

a detection process of detecting an unauthorized access transmitted from a transmitter to services disclosed from a customer site to other communication networks adjacent to the user's communication network via the user's communication network; and

when the detection of the unauthorized access is notified, performs the following processes:

a search process of searching the flowing-in path of the unauthorized access to the services disclosed from the customer site;

a determination process of determining a <u>plurality of</u> countermeasure implementation planning ~~place~~ <u>places from among a plurality of places, which include the other communication networks, edge routers of the user's communication network each of which is arranged on each border of the other communication networks, and POP (point of presence) edge routers within the user's communication network, the plurality of places being</u> for protecting the services from the unauthorized access based on a result of the search; and

a notification process of notifying <u>at least one or more notified parties, which include other unauthorized access prevention systems each of which resides within the other communication networks, the edge routers of the user's communication network, and the POP edge routers within the user's communication network,</u> ~~only a flow source that is one of the other communication networks~~ of the determination of the countermeasure implementation planning ~~place~~ <u>places</u>, when <u>it is determined that</u> ~~the determination unit determines~~ the notified parties are ~~flow source as~~ the countermeasure implementation planning ~~place~~<u>places</u> for a reason that the unauthorized access was flowed into the user's communication ~~network.~~<u>network,</u> <u>wherein:</u>

<u>the notification process notifies the other unauthorized access prevention systems of the determination when it is determined that the other communication networks are the countermeasure implementation planning places, and</u>

<u>the notification process notifies the edge routers or the POP edge routers of the determination when the other communication networks do not have a reliable relationship with the users' communication network even if it is determined that the other communication networks are the countermeasure implementation planning places.</u>

3-4.   (Cancelled)

5.   (Previously presented) The recording medium according to claim 2, wherein the process of searching the flowing-in path is performed by the computer based on the monitoring information on the traffic transmitted by the user's communication network and the unauthorized access information indicating the contents of the unauthorized access.

6.   (Currently Amended) The recording medium according to claim 5, wherein the monitoring information includes at least the position information on an the edge router routers arranged on the border between the user's communication network and the communication network adjacent to the user's communication network and the monitoring information on the traffic that flows into the user's communication network via one of the edge router routers.

7.   (Currently Amended) The recording medium according to claim 2, wherein the notification process makes the computer execute a process of notifying the determination to the other communication networks flow source after mutual attestation is conducted with the other communication networks when it is determined that the other communication networks are determined as the countermeasure implementation planning places flow source of the unauthorized access.

8.   (Currently Amended) The recording medium according to claim 2, wherein when the other communication networks are determined as the countermeasure implementation planning places, the process of notifying the determination to the other communication networks is performed by the computer flow source after information on a security policy for the operation of each network is exchanged with the other communication networks. flow source that transmits the unauthorized access is performed by the computer.

5

9.   (Previously presented) The recording medium according to claim 8, wherein information on a security policy is the information indicating the time required until the countermeasure against the unauthorized access is cancelled after the unauthorized access is not detected any more.

10.   (Currently amended) The recording medium according to claim 9, wherein when the time indicated by the information on the security policy differs between the user's communication network and the other communication networks flow source, a shorter time of the two is used as the time required until the countermeasure against unauthorized access is cancelled after the unauthorized access is not detected any more.

11.   (Currently amended) The recording medium according to claim 10, wherein the process of notifying the other communication networks flow source of the determination and the information indicating the time required until the countermeasure against the unauthorized access is cancelled after the unauthorized access is not detected any more is performed by the computer.

12.   (Currently amended) The recording medium according to claim 2, wherein the process of notifying the other communication networks flow source of the unauthorized access of the determination using the communication path that differs from the flowing-in path of the unauthorized access is performed by the computer.

13.   (Currently amended) A recording medium in which a program that directs a computer residing within a user's communication network to implement a countermeasure against unauthorized access is recorded and in which the program can

be read by the computer, and the program directs the computer to perform the following processes by being executed by the computer:

a detection process of detecting an unauthorized access transmitted from a transmitter to services disclosed from a customer site to other communication networks adjacent to the user's communication network via the user's communication network; and

when the detection of the unauthorized access is notified, performs the following processes:

a search process of searching the flowing-in path of the unauthorized access to the services disclosed from the customer site;

a determination process of determining a <u>plurality of</u> countermeasure implementation planning ~~place~~<u>places from among a plurality of places, which include the other communication networks, edge routers of the user's communication network each of which is arranged on each border of the other communication networks, and POP (point of presence) edge routers within the user's communication network, the plurality of places being</u> for protecting the services from the unauthorized access based on a result of the search; and

a notification process for judging whether ~~a flow source, which is one of~~ the other communication networks<u>, is</u> <u>are</u> notified of the determination, when it is determined that the <u>other communication networks are</u> ~~flow source is~~ the countermeasure implementation planning ~~place~~<u>places</u> for a reason that the unauthorized access was flowed into the user's communication network, ~~wherein~~<u>wherein:</u>

the notification process notifies <u>other unauthorized access prevention systems each of which resides within the other communication networks</u> ~~only the flow source~~ of the determination of the countermeasure implementation planning ~~place~~<u>places</u>, when it

7

is judged that the <u>other communication networks are</u> ~~flow source is~~ notified of the determination, ~~and~~

the notification process notifies the edge routers or the POP edge routers of the determination that the other communication networks do not have a reliable relationship with the users' communication network even if it is judged that the other communication networks are notified of the determination, and

by having the program executed by the computer;

an unauthorized access countermeasure implementation control process that has the countermeasure for protecting the services from the unauthorized access implemented in the <u>user's communication networks</u> ~~flow source~~ when it is judged that the determination will not be notified to the <u>other communication networks</u> ~~flow source~~ based on the above notification process is further performed by the computer.

14.   (Currently amended) The recording medium according to claim 13, wherein the judgement is made based on judgement information on the <u>other communication networks</u> ~~flow source~~ that is given in advance.

15.   (Currently amended) The recording medium according to claim 2, wherein by having the program executed by the ~~computer;~~ <u>computer,</u> the unauthorized access countermeasure implementation control process that has the countermeasure for protecting the services from the unauthorized access implemented <u>at the edge routers or the POP edge routers</u> ~~in the user's communication network~~ based on the determination ~~that said~~<u>of the</u> countermeasure <u>implementation planning places</u> ~~is implemented in the user's communication network~~ is performed by the computer.

16.   (Cancelled)

17.   (Currently amended) The recording medium according to claim ~~16~~ 15, wherein the process of identifying one of the POP edge routers to which the transmitter is connected based on the information obtained from the operation management system that manages the operation of the user's communication network is further performed by the computer, when it is determined that the POP edge routers are the countermeasure implementation planning places.

18.   (Currently amended) The recording medium according to claim 15, wherein by having the program executed by ~~the computer;~~ computer:

the process of obtaining a notification of the determination that unauthorized access to the services disclosed from a service-disclosed communication network different from the user's communication network is made to flow into the service-disclosed ~~said other~~ communication network is further performed by the computer; and

the process of implementing the countermeasure for protecting the services disclosed from said service-disclosed ~~other~~ communication network from the unauthorized access related to the notification at the edge routers or the POP edge routers ~~in the user's communication network~~ when the notification is obtained by the notification obtaining process is performed by the computer.

19.   (Original) The recording medium according to claim 15, wherein the countermeasure implemented by the unauthorized access countermeasure implementation control process is cancelled after the unauthorized access is not detected any more and a preset time passes.

20.   (Currently amended) The recording medium according to claim 19, wherein the preset time is set based on the security policy on the network operation of both the user's communication network and the service-disclosed ~~other~~ communication network.

21.   (Currently amended) The recording medium according to claim 20, wherein when the times set between the user's communication network and the service-disclosed other communication network based on the security policy on the network operation of both networks differ between both networks, the countermeasure is cancelled after the unauthorized access is not detected any more and a shorter time of the two passes.

22.   (Currently amended) The recording medium according to claim 2, wherein by having the program executed by the computer, computer:

the process of obtaining a notification of the determination that unauthorized access to the services disclosed from a service-disclosed communication network different from the user's communication network is made to flow into said service-disclosed other communication network is performed by the computer;

the process of searching the flowing-in path of the unauthorized access related to the notification in the user's communication network when the notification is obtained by the notification obtaining process is performed by the computer;

the process of determining the place to implement the countermeasure for protecting the services disclosed from said service-disclosed other communication network from the unauthorized access related to the notification based on the result of the search when the notification is obtained by the notification obtaining process is performed by the computer; and

the process of notifying, according to a determination that the countermeasure is implemented in the other communication networks flow source that makes the unauthorized access related to the notification flow into the user's communication network when the notification is obtained by the notification obtaining process, the

determination to the <u>other communication networks</u> ~~flow source~~ is performed by the computer.

23.   (Currently amended) The recording medium according to claim 22, wherein by having the program executed by the ~~computer;~~ <u>computer:</u>

the unauthorized access countermeasure implementation control process that has the countermeasure for protecting the services disclosed from the user's communication network or the <u>service-disclosed</u> ~~other~~ communication network from the unauthorized access related to the notification implemented in the communication network of the notification source of the notification when the notification obtained by said notification obtaining process is the same as that obtained in the past is further performed by the computer.

24.   (Original) The recording medium according to claim 23, wherein the process of notifying the information that uniquely identifies the unauthorized access related to the notification when the determination is notified is performed by the computer.

25.   (Currently Amended) The recording medium according to claim 2, wherein by having the program executed by the ~~computer;~~ <u>computer:</u>

the process of recording the history of the notification is further performed by the computer.

26.   (Currently amended) An unauthorized access prevention method performed by an unauthorized access prevention system which resides within a user's communication network, including:

searching the flowing-in path of unauthorized access transmitted from a transmitter to services disclosed from a customer site to other communication networks adjacent to the user's communication network via the user's communication network;

determining a plurality of countermeasure implementation planning place places from among a plurality of places, which include the other communication networks, edge routers of the user's communication network each of which is arranged on each border of the other communication networks, and POP (point of presence) edge routers within the user's communication network, the plurality of places being for protecting the services from the unauthorized access based on a result of the search; and

notifying at least one or more notified parties, which include other unauthorized access prevention systems each of which resides within the other communication networks, the edge routers of the user's communication network, and the POP edge routers within the user's communication network, only a flow source that is one of the other communication networks of the determination of the countermeasure implementation planning placeplaces, when it is determined that the notified parties are the determination unit determines the flow source as the countermeasure implementation planning places for a reason that the unauthorized access was flowed into the user's communication network.network, wherein:

the notifying notifies the other unauthorized access prevention systems of the determination when it is determined that the other communication networks are the countermeasure implementation planning places, and

the notifying notifies the edge routers or the POP edge routers of the determination that the other communication networks do not have a reliable relationship with the users' communication network even if it is determined that the other communication networks are the countermeasure implementation planning places.

27.   (Cancelled)